Commonwealth of Kentucky Natural Resources and Environmental Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

STATE ORIGIN AIR QUALITY PERMIT

Permittee Name: Columbia Kentucky Corporation
Mailing Address: Clay/Leslie Industrial Park

Route 3, Box 600

Manchester, Kentucky 40962

Source Name: Columbia Kentucky Corporation

Mailing Address: Same as above

Source Location: Clay/Leslie Industrial Park

Manchester, Kentucky

KYEIS ID #: 021-051-00051

SIC Code: 2435

Region: London County: Clay

Permit Number: S-01-067 Log Number: 53311

Permit Type: State Origin / Operating

Issuance Date: November 30, 2001 Expiration Date: November 30, 2011

> John E. Hornback, Director Division for Air Quality

Permit Number: <u>S-01-067</u> **Page:** <u>2</u> **of** <u>17</u>

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on November 29, 2000, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 52:040, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: <u>S-01-067</u> **Page:** <u>3</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit: 01 (01) Veneer Operations (Debarking, lathing, sawing and composers)

Description: Wood processing rate: 61.3 tons/hr

Construction Commenced: 1997

Continuous and batch Operation: Debarkers, Lathes, Saws, and Composers

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations (applicable to an emission unit commenced on or after July 2, 1975)

Regulation 401 KAR 63:010, Fugitive Emissions

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to State Regulation 401 KAR 59:010, particulate matter emissions generated from the wood being processed shall not exceed [17.31 (P) 0.16] lbs/hr based on a three-hour average where P is the processing rate in tons/hr. Using Columbia Kentucky's processing rate of 63.1 tons per hour, this equation would show them to have the potential to emit more than 100 tons PM per year. However due to Columbia's method of operation, their process potential emissions cannot reach the level allowed by 401 KAR 59:010. Therefore, they are not subject to Title V review.
- b) Pursuant to State Regulation 401 KAR 59:010, any continuous emissions into the open air shall not equal or exceed twenty percent (20%) opacity for more than three (3) minutes. The opacity of which is measured in accordance with Reference Method 9, filed by reference in 401 KAR 50:015.

Compliance Demonstration Method:

- a) Performance tests, where required, used to demonstrate compliance with the particulate matter standard as listed above shall be conducted according to Reference Method 5.
- b) In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9.

Permit Number: <u>S-01-067</u> **Page:** <u>4</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. <u>Testing Requirements</u>:

See Section C, General Condition F.1.

4. **Monitoring Requirements:**

See Section C, General Condition F.1.

5. Recordkeeping Requirements:

See Section C, General Conditions B.1, B.2, and F.1.

6. Reporting Requirements:

Permit Number: <u>S-01-067</u> **Page:** <u>5</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit: 02 (02) Natural gas fired indirect heat exchanger

Description: Ray BC073 500hp

Primary Fuel: Natural Gas

Maximum Continuous Rating 20.92 mmBTU/hr

Construction Commenced: 1997

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:015, New Indirect Heat Exchangers (applicable to an emission unit with a capacity less than 250 mmBTU/hr and commenced on or after April 9,1972).

Regulation 401 KAR 60:005, incorporating by reference Regulation 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 100 mmBTU/hr but greater than or equal to 10 mmBTU/hr commenced after June 9,1989.

1. **Operating Limitations:**

None.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:015 Section 4(1), particulate emissions shall not exceed 0.471 lb/mmBTU, based on a three hour average.
- b) Pursuant to Regulation 401 KAR 59:015, visible emissions shall not exceed 20 percent opacity based on a six minute average except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any 60 minutes during cleaning the fire-box or soot blowing.
- c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(c), sulfur dioxide emissions shall not exceed 2.22 lb/mmBTU, based on a twenty-four-hour average.
- d) These units are considered to be in compliance with the allowable SO₂, PM, and opacity limitations while burning natural gas.

3. <u>Testing Requirements</u>:

The permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually or more frequently if requested by the Division.

Permit Number: <u>S-01-067</u> **Page:** <u>6</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Monitoring Requirements:**

Particulate, sulfur dioxide, and visible emissions as measured by methods referenced in State Regulation 401 KAR 50:015, Documents incorporated by reference, Section 1, shall not exceed the respective limitations specified herein.

5. Recordkeeping Requirements:

The permittee shall record and maintain records of the amount of fuel combusted during each day, in accordance with Regulation 40 CFR 60, Subpart Dc.

Reporting Requirements:

Permit Number: <u>S-01-067</u> **Page:** <u>7</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit: 03 (03) Natural gas fired dryers (two) (Process Drying Wood Veneer)

Description: Coe Model 28 WCD

Primary Fuel:

Dryer Rated Capacity (each)

Process Rate

Onstruction Commenced:

Natural Gas

27.6 mmBTU/hr

9.15 ton/hr

1997

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, source associated with a process operation with respect to particulates.

Regulation 401 KAR 63:010, Fugitive emissions.

1. **Operating Limitations**:

Maximum rate of veneer processed shall not exceed 9.15 tons/hr.

2. Emission Limitations:

a. Pursuant to Regulation 401 KAR 59:010 visible emissions shall not exceed 20 percent opacity.

3. Testing Requirements:

See Section C, General Condition F.1.

4. Monitoring Requirements:

See Section C, General Condition F.1.

5. Recordkeeping Requirements:

See Section C, General Conditions B.1, B.2, and F.1.

Reporting Requirements:

Permit Number: $\underline{S-01-067}$ Page: $\underline{8}$ of $\underline{17}$

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit: 04 (04) Natural gas fired indirect heat exchanger

Description: Cleaver Brooks CB700 - 300

Primary Fuel: Natural Gas
Maximum Continuous Rating 12.5 mmBTU/hr

Construction Commenced: 1997

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:015, New Indirect Heat Exchangers (applicable to an emission unit with a capacity less than 250 mmBTU/hr and commenced on or after April 9,1972)

Regulation 401 KAR 60:005, incorporating by reference Regulation 40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, for units less than or equal to 100 mmBTU/hr but greater than or equal to 10 mmBTU/hr commenced after June 9,1989.

1. Operating Limitations:

None.

2. <u>Emission Limitations</u>:

- a) Pursuant to Regulation 401 KAR 59:015 Section 4(1), particulate emissions shall not exceed 0.557 lb/mmBTU, based on a three hour average.
- b) Pursuant to Regulation 401 KAR 59:015, visible emissions shall not exceed 20 percent opacity based on a six minute average except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any 60 minutes during cleaning the fire-box or soot blowing.
- c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(c), sulfur dioxide emissions shall not exceed 2.97 lb/mmBTU, based on a twenty-four-hour average.
- d) These units are considered to be in compliance with the allowable SO₂, PM, and opacity limitations while burning natural gas

3. <u>Testing Requirements</u>:

The permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually or more frequently if requested by the Division.

Permit Number: <u>S-01-067</u> **Page:** <u>9</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Monitoring Requirements:

Particulate, sulfur dioxide, and visible emissions as measured by methods referenced in State Regulation 401 KAR 50:015, Documents incorporated by reference, Section 1, shall not exceed the respective limitations specified herein.

5. Recordkeeping Requirements:

The permittee shall record and maintain records of the amount of fuel combusted during each day, in accordance with Regulation 40 CFR 60, Subpart Dc.

6. Reporting Requirements:

Permit Number: <u>S-01-067</u> **Page:** <u>10</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit: 05 (05) Wood Waste Operations (Chippers, chip transfer, storage piles, storage bins, and truck loadout)

Description: Wood waste processing rate: 21.7 tons/hr

Bark waste processing rate: 3.158 tons/hr

Construction Commenced: 1997

Continuous and batch Operation: Chippers, transfer, storage and truck loadout

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations. applicable to an emission unit commenced on or after July 2, 1975.

Regulation 401 KAR 63:010, Fugitive Emissions .

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. **Operating Limitations:**

None

Permit Number: <u>S-01-067</u> **Page:** <u>11</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

- a. Pursuant to State Regulation 401 KAR 59:010, particulate matter emissions generated from the wood being processed shall not exceed [17.31 (P) 0.16] lbs/hr based on a three-hour average where P is the processing rate in tons/hr. Using Columbia Kentucky's processing rate of 63.1 tons per hour, this equation would show them to have the potential to emit more than 100 tons PM per year. However due to Columbia's method of operation, their process potential emissions cannot reach the level allowed by 401 KAR 59:010. Therefore, they are not subject to Title V review.
- b. Pursuant to State Regulation 401 KAR 59:010, any continuous emissions into the open air shall not equal or exceed twenty percent (20%) opacity.
- c. The efficiency of the multi-cyclone equipment shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with good engineering practice.

Compliance Demonstration Method:

- a. Performance tests, where required, used to demonstrate compliance with the particulate matter standard as listed above shall be conducted according to Reference Method 5.
- b. In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9.

3. Testing Requirements:

See Section C, General Condition F.1.

4. Monitoring Requirements:

See Section C, General Condition F.1.

5. Recordkeeping Requirements:

See Section C, General Conditions B.1, B.2, and F.1.

6. Reporting Requirements:

Permit Number: <u>S-01-067</u> **Page:** <u>12</u> **of** <u>17</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit: 06 (06) Haul Road and Yard Area

APPLICABLE REGULATIONS:

Regulation 401 KAR 63:010, Fugitive Emissions.

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. **Operating Limitations:**

None

2. <u>Emission Limitations</u>:

Regulation 401 KAR 63:010, Fugitive Emissions.

3. Testing Requirements:

N/A

4. Monitoring Requirements:

N/A

5. Recordkeeping Requirements:

N/A

6. Reporting Requirements:

N/A

Permit Number: <u>S-01-067</u> **Page:** <u>13</u> **of** <u>17</u>

SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

- 2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- 3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit.

 [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11]
- 4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5]
- 5. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
- 6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
- 7. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20. (Note include only if subject to federal NSPS or NESHAP standards or 25 TPY in an ozone Nonattainment)
- 8. All previously issued construction and operating permits are hereby subsumed into this permit.

Permit Number: <u>S-01-067</u> **Page:** <u>14</u> **of** <u>17</u>

SECTION C - GENERAL CONDITIONS (CONTINUED)

B. Recordkeeping Requirements

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 52:040 Section 3(1)(f)]

2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

C. Reporting Requirements

- 1. a. In accordance with the provisions of 401 KAR 50:055, Section 1 the permittee shall notify the Division for Air Quality's London Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Division for Air Quality's London Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report. [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
- 2. The permittee shall furnish information requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
- 3. Summary reports of monitoring required by this permit shall be submitted to the Division's London Regional Office at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The semi-annual reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21. All deviations from permit requirements shall be clearly identified in the reports.

Permit Number: <u>S-01-067</u> **Page:** <u>15</u> **of** <u>17</u>

SECTION C - GENERAL CONDITIONS (CONTINUED)

D. <u>Inspections</u>

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
- b. To access and copy any records required by the permit:
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

E. <u>Emergencies/Enforcement Provisions</u>

- 1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
- 2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
- 4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

Permit Number: <u>S-01-067</u> **Page:** <u>16</u> **of** <u>17</u>

SECTION C - GENERAL CONDITIONS (CONTINUED)

F. Compliance

 Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

- a. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
- b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device.
- c. A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division.
- 2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's London Regional Office and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality London Regional Office 875 S. Main Street London, KY 40741

Division for Air Quality Central Files 803 Schenkel Lane

Frankfort, KY 40601-1403

- 3. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
 - (a) Applicable requirements that are included and specifically identified in this permit; or
 - (b) Non-applicable requirements expressly identified in this permit.

Permit Number: <u>S-01-067</u> **Page:** <u>17</u> **of** <u>17</u>

SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

	<u>Description</u>	Generally Applicable Regulation
1.	Band/Marking Station	N/A
2.	Oil Fired Heater (.35 mmBTU/hr)	N/A
3.	Misc. VOC containing Products	N/A
4.	Diesel Storage Tank	N/A